![California ISO logo]

Market Simulation Structured Scenarios

Excess Behind the Meter Production Project

Version 1.0

6/11/2020

Location of Document

http://www.caiso.com/Documents/BusinessRequirementsSpecification-ExcessBehindtheMeterProduction.pdf

Revision History

Date	Version	Description
6/12/2020	1.0	Initial Draft

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1. Introduction

The objective of this document is to provide information for ISO Market Participants to participate in the Structured Market Simulation activities for the Excess Behind the Meter Production project. For the scope of this initiative and implementation, please refer to the project Business Requirements Specification (BRS) on the ISO Release Planning site.

2. Market Simulation Structured Scenarios

2.1 High Level Overview

The identified scenarios will be executed during the market simulation to demonstrate functionality for market participant understanding and validation.

The identified scenarios will be executed during the structured scenario portion of the Excess Behind the Meter Production (EBTMP) market simulation. Implementation and this initiative scope provided in the Excess Behind the Meter Production Business Requirements Specification.

2.2 Structured Scenarios Conditions and Setup

The following additional setup will be used by the ISO during the scenario execution. . Please note that market simulation settlement timelines will coincide with those of the Market Settlement Timeline Transformation (MSTT), which will activate in production on the same date as EBTMP.

Market Participant pre-Market Simulation Actions
1. Market participants will need to register their request with the ISO to participate in the <project name> simulation via the MarketSim@caiso.com mailbox.

2. Please identify a Load Resource ID associated with your SCID that will be used to submit meter data to the MRI-S system for the market simulation, which should specifically include:

    a. Load Resource ID, as defined in the Master File

    b. Gross Load ("LOAD"), as defined in the policy initiative, measurement type meter data for all settlements intervals of the specified trade date (all 24 hours)

    c.   Excess Behind the Meter Production ("EBTMP") measurement type meter data for all settlement intervals of the specified trade date (all 24 hours).

Notes on Meter Data Set to be used in market simulation

• All Load Resource IDs submitting meter data will have an EBTMP submission requirement set by the ISO
• Data intervals per Load Resource IDs need to be the same as the interval designation recorded in Master File, e.g., 5-minutes, 15-minutes or 60-minutes
• EBTMP meter data will not have estimates provided by ISO, unlike Gross Load meter data, and failure to submit will result in Settlement calculations

Please submit your request and any additional information identified above by (date to be determined).

ISO pre-Market Simulation Activities

1. The ISO will set up the Market Simulation environment and publish a market simulation schedule to support the following scenarios outlined in more detail in Section 2.3 below.

Market-related enhancements:
- Scenario #1: Publish Initial Statement and Invoice.
- Scenario #2: Publish ReCalc Statement and Invoice.
- Scenario #3: ISO publishes its EBTMP Performance Report by TAC Area.
- Scenario #4: ISO will calculate monthly TAC charges based on previously submitted daily Gross Load values.

2.3 Structured Scenarios

Scenario Execution Trade Date(s): TBD	
Scenario #1	Publish Initial Statement and Invoice.
Description	Scheduling Coordinators submit LOAD meter data for Load Resources to produce settlement results. Scheduling Coordinators retrieve bill determinants, submitted LOAD meter data for performed Initial Settlement Statement.
Expected System Outcome	Scheduling Coordinator Meter Entity (SCME) meter data submission from SCME systems to be successfully received, validated, and processed by ISO settlement system.
Anticipated Settlement Outcome	Charge Code 6474 Real-Time Unaccounted for Energy Settlement

Scenario Execution Trade Date(s): TBD	
Details:	
ISO Actions	• Ensure MRI-S is available for meter data submittals via UI and API • Verify participating Load Resource IDs are identified as requiring EBtMP meter data submission in Master File • Run the market for designated trade date • Publish Initial Settlement Statement • Publish market invoice
ISO Market Participant Actions	Scheduling Coordinators submit prepared Gross Load meter data for designated trade date. Data set shall include: • Load Resource ID, as defined in Master File • Gross Load ("LOAD") meter data using meter intervals as identified in Master File Notes: • Load Resource Gross Load meter data is required to cover all meter intervals for all twenty four (24) hours of the specified trade day • All Gross Load meter data values must be non-negative (>= 0) • Meter data submitted via MRI-S User Interface (UI) or API
EIM Market Participant Actions	Non-Applicable.

Settlements	
	Scenarios 1 and 2 involve settlement of DAM, FMN, RTM, and other market results based on new net load meter definitions that consider both Gross Load and EBTMP meter data actuals.

Scenario Execution Trade Date(s): TBD	
Scenario #2	Publish ReCalc Statement and Invoice.
Description	Scheduling Coordinators submit EBTMP meter data for the same Load Resources as in Scenario 1 to produce settlement results. Scheduling Coordinators retrieve bill determinants, submitted LOAD and EBTMP meter data for performed Re-Calc Settlement Statement.
Expected System Outcome	Re-Calc Settlement Statement will confirm new UFE/Net Load Meter definition per the EBTMP initiative and tariff revision.
Anticipated Settlement Outcome	Charge Code 6474 Real-Time Unaccounted for Energy Settlement
Details:	
ISO Actions	Ensure MRI-S is available for meter data submittals via UI and API Verify participating Load Resource IDs are identified as requiring EBtMP meter data submission in Master File Run the market for designated trade date Publish ReCalc Settlement Statement Publish market invoice.
ISO Market Participant Actions	Scheduling Coordinators submit prepared EBTMP meter data for designated trade date for the same Load Resources as in Scenario 1. Data set shall include: • Load Resource ID, as defined in Master File • EBTMP ("EBTMP") meter data using meter intervals as identified in Master File Notes: • EBTMP meter data is required to cover all meter intervals for all twenty four (24) hours of the specified trade day

Scenario Execution Trade Date(s): TBD	
	• All EBTMP meter data values must be non-negative (>= 0) • Meter data submitted via MRI-S User Interface (UI) or API SCME retrieves settlement statement, bill determinant information for charge codes with updated Unaccounted for Energy/Net Load Meter definitions (as identified in Appendix C in BRS).
EIM Market Participant Actions	Non-Applicable

Settlements	
	Scenarios 1 and 2 involve settlement of DAM, FMN, RTM, and other market results based on new net load meter definitions that consider both Gross Load and EBTMP meter data actuals.

Scenario Execution Trade Date(s): TBD	
Scenario #3	ISO publishes its EBTMP Performance Report by TAC Area.
Description	ISO publishes its EBTMP Performance Report by TAC Area.
Expected System Outcome	OASIS shall display new "Excess Behind the Meter Production" Report for all 24 hours of a specified trade date on a simulated T+52B timeline (e.g. under an abbreviated market sim calendar). Data presented by TAC Area for each trade hour, and is available for public access and retrieval.
Anticipated Settlement Outcome	Non-Applicable
Details:	
ISO Actions	Accelerate settlement calendar to the post-meter submission deadline timeline (which will be T+52B, effective 1/1/2021) to publish a FINAL EBTMP performance data snapshot for public display. Ensure a full set of EBTMP (and Gross Load, although not reported) meter data was submitted for each settlement interval for all 24

Scenario Execution Trade Date(s): TBD	
	hours of the specified trade date to be reported. Confirm meter data is submitted for all TAC Areas.
ISO Market Participant Actions	Market Participants shall review displayed EBTMP Performance Report data in OASIS; retrieve data via OASIS API
EIM Market Participant Actions	Non-Applicable

Settlements
Scenario 3 does not involve settlements. Report data is not settlement quality.

Scenario Execution Trade Date(s): TBD	
Scenario #4	ISO will calculate monthly TAC charges based on previously submitted daily Gross Load values.
Description	ISO will calculate monthly TAC charges based on previously submitted daily Gross Load values.
Expected System Outcome	Calculate TAC charges for each UDC based upon the Gross Load within that UDC and paid to the relevant PTO.
Anticipated Settlement Outcome	Charge Code 372 High Voltage Access Charge Allocation
Details:	
ISO Actions	Publish monthly statement.
ISO Market Participant Actions	SCME retrieves settlement statement, bill determinant information for charge code 372.
EIM Market Participant Actions	Non-Applicable

3. ISO Market Simulation Contact

Please contact MarketSim@caiso.com if you have any questions or concerns regarding these scenarios.